

ABSTRACT

[0039] A method and system for location-determination of a mobile comprising of a receiver with a variable processor gain of up to 45.15 dB for detecting signals transmitted from transmitters that at a farther distance as well as from transmitters that are situated in sparsely populated areas. The system also includes a plurality of terrestrially deployed transmitters known as "pseudolites" that broadcast GPS-like signals, and in addition implementing the use of existing, available information from modulated signals, such as phase, amplitude and convolution with pseudorandom codes.